Frequently Asked Questions (FAQs) COVID-19's Effect on the April 2021 Advance Economic Indicators Report

Data Collection

How has the collection of the retail and wholesale data been affected?

For the April 2021 Advance Economic Indicators Report, processing and data quality were monitored throughout the month and quality metrics, including response rates, fell within normal ranges for both the retail and wholesale survey.

Did the Census Bureau change its data collection procedures for the retail and wholesale surveys and the international trade in goods this month?

Retail and Wholesale:

No. The Census Bureau utilizes a wide variety of collection methods for its surveys. Data, particularly from businesses, are collected on paper, online, fax, and through telephone interviews. Our National Processing Center (NPC) is responsible for mailing, data capture, responding to email messages, and handling inbound/outbound calls. Data collection occurred primarily via email requests and online reporting, supplemented by calling operations by staff in NPC.

International Trade:

Yes. Actual import transactions that are filed via paper were included with current month statistics. Over the past several months, these paper transactions were estimated, though the estimates typically made up less than 0.1% of the total import value in any given month. Actual paper transactions will continue to be included each month as long as they are available.

Methodology

Were any estimates withheld or delayed because of data collection problems?

No. All April estimates were released as scheduled.

Did the Census Bureau modify its usual weighting or estimation methods used to produce monthly retail and wholesale estimates for April 2021?

No. Standard weighting and estimation methods were used to produce all indicator estimates for April 2021.

Has the reliability of the monthly retail and wholesale and the international trade in goods estimates changed?

Retail and Wholesale:

No. The reliability of the retail and wholesale estimates as measured by the coefficient of variation for monthly totals and the standard error for month-to-month change has not changed substantially. For the published industries, reported data for April 2021 exhibited variation similar to that for prior months.

International Trade:

No. As detailed above in the data collection area for international trade in goods, there was an estimation of the data that are typically filed via paper transactions. However, the impact of these estimates should be minimal on the overall import statistics.

Seasonal Adjustment

Did the Census Bureau alter the procedures for developing seasonally adjusted estimates for monthly retail and wholesale data and international trade in goods?

Retail and Wholesale:

Yes. Consistent with our approach since March 2020, an alteration was made in an option in the Census Bureau's X-13ARIMA-SEATS seasonal adjustment software (the "additive outlier adjustment" option) for the April 2021 data month for some kinds of business. This was done in effort to ensure that the published seasonally adjusted values fully include any immediate effects. These effects are not typical April effects and so should not be permitted to influence the seasonal factors for April and surrounding months. The altered option was applied to each kind of business whose April unadjusted value was found to be statistically untypical, as indicated by the appropriate t-statistic having a magnitude larger than a commonly used "critical value", and for which there were independent indications of an impact. Such indications confirm that a April survey value has an unusual potential to be untypical and justify the use of a standard critical value. In a usual month, every survey value is "blindly" tested, therefore a higher critical value is used, making it more difficult for the survey value to be classified as untypical.

International Trade:

No. An alteration was not made to our procedures for developing our seasonally adjusted estimates. Seasonal adjustments are based on annual data and are projected for a full calendar year. These factors are produced with April statistics.

What was the impact of altering the seasonal adjustment option (additive outlier adjustment) for the April 2021 data month?

The kinds of business that the alteration impacted may show a change in either direction from March. For these kinds of business, if the April values had been treated as typical, the program would have taken part of the change to be a seasonal effect and would have adjusted the data in a way that would have brought the adjusted percent change from March to April closer to zero. The altered option we used determined the changes in these kinds of business to be out of the ordinary. As a result, the March to April percent change in the adjusted value was left further from zero.

How was the survey value for a kind of business determined to be out of the ordinary?

Each month, independent indications of how each kind of business performed are researched as part of our normal review of the estimates to detect reporting errors. This research includes, but is not restricted to, conversations with companies in our survey, a review of publicly available press releases from both companies and industry associations, and a review of other economic indicators.

This month, the April value of a kind of business was considered to be out of the ordinary if it was found to be statistically untypical (as indicated by the appropriate t-statistic having a magnitude larger than a "standard" critical value) and independent sources indicated an impact.

Additional Information

Are there additional Census Bureau resources available on the COVID-19 Pandemic?

Yes. The Census Bureau has created a <u>COVID-19 reference page</u> which includes links to relevant Census data sources.

Source: U. S. Census Bureau

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